IAP7 Rec'd PCTIPTO 10 MAY 2006

## TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

ATTORNEY'S DOCKET NUMBER

80.US2.PCT U.S. APPLICATION NO. (IT LOWN, SEP 37 CFR 1.5) CONCERNING A FILING UNDER 35 U.S.C. 371 INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED PCT/US2004/038920 November 18, 2004 November 21, 2003 TITLE OF INVENTION 4-OXO-4,5-DIHYDRO-FURAN-2-CARBOXYLIC ACID DERIVATIVES AND METHODS OF TREATMENT OF METABOLIC-RELATED DISORDERS THEREOF APPLICANT(S) FOR DO/EO/US Jae-Kyu Jung, Graeme Semple, Benjamin R. Johnson Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: 1. 🔯 This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. з. 🔯 This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. 🛛 The US has been elected (Article 31). 5. 🛛 A copy of the International Application as filed (35 U.S.C. 371(c)(2))) a. is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. c. is not required, as the application was filed in the United States Receiving Office(RO/US) 6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). 7. 🔯 Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. d. A have not been made and will not be made. 8.  $\square$ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. 🛛 An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT 10. 🔲 Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11. 🔝 An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 12. 🔲 13. 🔯 A preliminary amendment. 14. 🛛 An Application Data Sheet under 37 CFR 1.76. 15. 🗌 A substitute specification. 16. 🛛 A power of attorney and/or address letter. - included on the Declaration 17. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825. 18. 🔲 A second copy of the published international application under 35 U.S.C. 154(d)(4). 19. A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 20. 🛛 Other items or information: Paper Copy of Sequence Listing; Sequence Submission Statement

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it displays a valid OMB control number. U.S. APPLICATION NO. (If known, see 37 CER 10/57873 INTERNATIONAL APPLICATION NO. ATTORNEY'S DOCKET NUMBER 80.US2.PCT PCT/US2004/038920 21. The following fees are submitted: Applicant use Office use only \$ 300.00 a) Basic national fee.....\$300.00 200.00 b) Examination fee \$200.00 \$ 500.00 c) Search fee.....\$500.00 \$1,000.00 **TOTAL OF ABOVE CALCULATIONS =** \$1000.00 Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof RATE **Total Sheets** Extra sheets Number of each 50 or fraction thereof (round up to a whole number) × \$250.00 0/50 =\$ n 76 - 100 = Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months \$ from the earliest claimed priority date (37 CFR 1.492(e)). \$ **CLAIMS** NUMBER FILED NUMBER EXTRA RATE 52 - 20 = x \$50.00 32 \$ 1600.00 **Total Claims** 1 - 3 = x \$200.00 \$ 0 Independent Claims + \$300.00 300.00 Yes \$ MULTIPLE DEPENDENT CLAIMS(S) (if applicable) TOTAL OF ABOVE CALCULATIONS = \$ 2,900.00 Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced \$ by 1/2. \$ 2,900.00 SUBTOTAL = Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed \$ priority date (37 CFR 1.492(f)). \$ 2,900.00 **TOTAL NATIONAL FEE =** Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an \$ appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property TOTAL FEES ENCLOSED = \$ 2,900.00 Amount to be refunded: Amount to be charged: a. A check in the amount of \$\_\_\_\_ to cover the above fees is enclosed. Please charge my Deposit Account No.50-1441 in the amount of \$2,900.00 to cover the above fees. A duplicate copy of this sheet is enclosed. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to X Deposit Account No. 50-1441. A duplicate copy of this sheet is enclosed. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card d. information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status. SIGNATURE S. Clark SEND ALL CORRESPONDENCE TO: Arena Pharmaceuticals, Inc. 6166 Nancy Ridge Drive Melody E. Clark San Diego, CA 92121-3223 NAME

REGISTRATION NUMBER

## 10/578732 IAP12 Rec'd PCT/PTO 10 MAY 2006

Telephone: (858) 453-7200, x. 1597 E-Mail: mclark@arenapharm.com

May 10, 2006

## Express Mail Label No. EV 332846617 US

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Commissioner for Patents

P. O. Box 1450

Alexandria, VA 22313-1450

RE:

U.S. National Phase Patent Application of

Serial No. PCT/US04/038920

For: "4-OXO-4,5-DIHYDRO-FURAN-2-CARBOXYLIC ACID DERIVATIVES AND METHODS OF TREATMENT OF METABOLIC-RELATED

DISORDERS THEREOF" Inventors: Jae-Kyu JUNG, et al.

Our Ref.: 80.US2.PCT

Dear Sir:

Enclosed please find the above-identified U.S. National Phase application under 35 U.S.C. 371 for filing with the United States Patent and Trademark Office. The following documents are transmitted herewith:

		Qua	<u>ntity</u>
1)	Transmittal Letter to the U.S. Designated/Elected Office (DO/EO/US)	2	Pages
•	Concerning a Filing Under 35 U.S.C. 371		
2)	Declaration and Power of Attorney (unsigned)	6	Pages
3).	Preliminary Amendment	20	Pages
4)	Application Data Sheet	5	Pages
5)	Sequence Submission Statement	1	Page
6)	Paper Copy of Sequence Listing	3	Pages
7)	Diskette containing Sequence Listing		
8)	Authorization to charge Deposit Account 50-1441 in the amount of \$2,900.00		
	for the filing fee – (see Transmittal Sheet)		
9)	Return Receipt Postcard		

The Commissioner is hereby authorized to charge any additional fees, or credit any overpayment in the processing of these documents to our Deposit Account No. 50-1441.

Very truly yours,

ARENA PHARMACEUTICALS, INC.

eloly & . Cloud

Melody E. Clark Reg. No. 51,566

Certificate of Mailing under 37 CFR 1.10

MEC / lal **Enclosures** Express Mail Label No.: EV 332846617 US

Date of Deposit: May 10, 2006 I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10, on the Date of Deposit shown above, postage prepaid and is addressed to Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Signature